

PATENT CLAIMS

1. Apparatus for monitoring a measurement transmitter
(2) of a field device (1) determining and/or monitoring
a physical and/or chemical process parameter,
5 wherein at least one sensor (8) is provided in the
housing for determining the temperature and relative
humidity in the housing (11) over a period of time in
predetermined intervals,
wherein a control-/evaluation-unit (7) is provided,
10 which, on the basis of the measured temperature and
relative humidity, determines the absolute humidity
and/or dewpoint in the housing (11) of the transmitter
(2), and issues an alarm when the absolute humidity
and/or dewpoint in the housing (11) of the transmitter
15 (2) reaches a critical value.
2. Apparatus as claimed in Claim 1,
wherein the sensor (8) for measuring temperature and
relative humidity is an SMD-semiconductor-sensor.
3. Apparatus as claimed in Claim 1 or 2,
20 wherein a memory unit (10) is provided, in which a
point, or range, of operation for the temperature is
predetermined.
4. Apparatus as claimed in Claim 1, 2, or 3,
wherein an input unit (12) is provided, by means of
25 which the point, or range, of operation for the
temperature can be entered.
5. Apparatus as claimed in Claim 1,
that the control-/evaluation-unit (7) sets the critical
value, such that, in the case of the lowest possible
30 operating temperature, no condensate forms in the
housing (11).

6. Apparatus as claimed in Claim 1 or 5,
wherein the control-/evaluation-unit (7) sets an alarm
when a predetermined tolerance-value near the critical
value is reached or subceeded.

5 7. Apparatus as claimed in Claim 6,
wherein the control-/evaluation-unit (7), on the basis
of historical information, issues information on when
the critical value is predicted to be reached.